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(54) Title: SCREENING METHODS USING ZEBRAFISH TO IDENTIFY THROMBOTIC AND ANTI-THROMBOTIC COMPOUNDS AND GENES

(57) Abstract: Disclosed are improved methods using zebrafish to identifying anti-thrombotic substances for use in therapy and to identify genes associated with all aspects of thrombus formation, including those associated with an increased risk of thrombosis in humans. The preferred screening assays described include laser irradiation injury, sodium hydroxide-induced gill bleeding and red cell lysis assays conducted in zebrafish and applicable to the study of thrombosis in humans.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/41249

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 49/00; C12Q 1/56; G01N 33/86

US CL : 424/9.1, 9.2; 435/13; 436/69

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/9.1, 9.2; 435/13; 436/69

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
West, Chemical Abstracts, Biosis

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GREGORY, M. et al. Genetic Analysis of Hemostasis and Thrombosis Using Vascular Occlusion. Blood Cells, Molecules, and Diseases. November/December 2002, Vol. 29, No. 3, pages 286-295, see entire document.	1-58
Y	JAGADEESWARAN, P. et al. Analysis of Hemostasis in the Zebrafish. Methods in Cell Biology. 1999, Vol. 59, pages 337-357, see entire document.	1-58
A	JAGADEESWARAN, P. et al. Developmental Expression of Thrombin in Zebrafish Embryos: A Novel Model to Study Hemostasis. Blood Cells, Molecules, and Diseases. 15 May 1997, Vol. 23, No. 9, pages 147-156.	1-58
A, P	US 2003/0212024 A1 (KEATING et al.) 13 November 2003 (11.13.2003), see entire document.	1-58
A	US 2002/0025297 A1 (SERBEDZIJA et al.) 28 February 2002 (28.02.2002), see entire document.	1-58
A, P	US 6,656,449 B1 (SERBEDZIJA et al.) 02 December 2003 (03.12.2003), see entire document.	1-58

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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